

In the Claims:

Please amend claims 1, 10, and 14 as follows:

1. (currently amended) A computer-implemented method for parsing and generating data structures for use by data processing applications in a computer system comprising the steps of:

utilizing sizeof and offsetof functions, defining a length and a location of each parameter of a data structure; and

storing said defined length and said defined location of each said parameter of the data structure within an identifier object in a data structure definition used for parsing and generating data structures.

2. (original) A method for parsing and generating data structures as recited in claim 1 wherein the data structure is an ATM information element (IE) and wherein the step of utilizing sizeof and offsetof functions, defining a length and a location of each parameter of a data structure includes the step of utilizing sizeof and offsetof functions, defining a length and a location of each data parameter of said ATM information element (IE).

3. (previously presented) A method for parsing and generating data structures as recited in claim 2 wherein said ATM information element (IE) is a Connection Identifier IE and wherein the step of utilizing sizeof and offsetof functions, defining a length and a location of each parameter of a data structure includes the step of utilizing sizeof and offsetof functions, defining a length and a location of each data parameter of said Connection Identifier IE.

4. (original) A method for parsing and generating data structures as recited in claim 3 includes the step of utilizing sizeof and offsetof functions, defining a length and a location of a preferred/exclusive parameter.

5. (original) A method for parsing and generating data structures as recited in claim 3 includes the step of utilizing sizeof and offsetof functions, defining a length and a location of a virtual path connection identifier (VPCI) parameter.

6. (original) A method for parsing and generating data structures as recited in claim 3 includes the step of utilizing sizeof and offsetof functions, defining a length and a location of a virtual channel identifier (VCI) parameter.

7. (original) A method for parsing and generating data structures as recited in claim 4 wherein the step of storing said length and said location of each said parameter of the data structure within an identifier object in a data structure definition includes the steps of storing said length and said location of said preferred/exclusive parameter in a preferred/exclusive parameter identifier object in said data structure definition.

8. (original) A method for parsing and generating data structures as recited in claim 5 wherein the step of storing said length and said location of each said parameter of the data structure within an identifier object in a data structure definition includes the steps of storing said length and said location of said virtual path connection identifier (VPCI) parameter in a VPCI parameter identifier object in said data structure definition.

9. (original) A method for parsing and generating data structures as recited in claim 6 wherein the step of storing said length and said location of each said parameter of the data structure within an identifier object in a data structure definition includes the

steps of storing said length and said location of said virtual channel identifier (VCI) parameter in a VCI parameter identifier object in said data structure definition.

10. (currently amended) A compiler and platform independent framework for parsing and generating data structures used by data processing applications in a computer system comprising:

means for defining a length and a location of each parameter of a data structure utilizing sizeof and offsetof functions; and

means for storing said defined length and said defined location of each said parameter of the data structure within an identifier object in a data structure definition used for parsing and generating data structures.

11. (original) A compiler and platform independent framework for parsing and generating data structures as recited in claim 10 is used by procedural table-driven or object rules-driven methods for parsing and generating data structures.

12. (original) A compiler and platform independent framework for parsing and generating data structures as recited in claim 10 is used for parsing and generating of protocol data units (PDUs) in data communication messages.

13. (original) A compiler and platform independent framework for parsing and generating data structures as recited in claim 10 is used for parsing and generating of control code for writing and reading headers for data storage.

14. (currently amended) A computer program product for parsing and generating data structures for use by data processing applications in a computer system, said computer system having a processor; a memory controller coupled to said

Serial No. 09/829,834

processor by a system bus; a main memory coupled to said memory controller; said computer program product including a plurality of computer executable instructions stored on a computer readable medium, wherein said instructions, when executed by said computer system, cause said computer system to perform the steps of:

utilizing sizeof and offsetof functions, defining a length and a location of each parameter of a data structure; and

storing said defined length and said defined location of each said parameter of the data structure within an identifier object in a data structure definition used for parsing and generating data structures.